

WHAT IS CLAIMED IS:

1. A probe for probing test points on a target board, comprising:
a first printed circuit board (PCB) having a plurality of signal routes for routing signals to a test instrument; and
a plurality of spring pins for probing the test points on the target board, each spring pin of which is i) disposed perpendicularly to the first PCB, and ii) electrically coupled to at least one signal route of the first PCB.
2. The probe of claim 1, wherein the first PCB has a plurality of holes that frictionally engage bodies of at least some of the plurality of spring pins.
3. The probe of claim 1, wherein:
the first PCB has a plurality of plated holes, each of which is electrically coupled to at least one signal route of the first PCB; and
at least some of the spring pins are inserted into and soldered to the plated holes.
4. The probe of claim 1, wherein said signal routes comprise tip-network components positioned adjacent said spring pins.
5. The probe of claim 4, wherein said tip-network components comprise isolation resistors.

6. The probe of claim 1, further comprising an alignment mechanism, attached to the first PCB, for aligning the probe with respect to said test points.
7. The probe of claim 6, wherein the alignment mechanism comprises a plurality of alignment pins.
8. The probe of claim 1, further comprising a mechanism, attached to the first PCB, for securing the probe to said target board.
9. The probe of claim 8, wherein said mechanism is a plurality of rivets.
10. The probe of claim 1, further comprising a second PCB having a plurality of signal routes, wherein:
 - at least some of the plurality of spring pins are electrically coupled to the signal routes of the second PCB such that their probe tips extend beyond a first edge of the second PCB;
 - the second PCB is abutted perpendicularly to the first PCB, with an edge of the second PCB opposite said first edge being abutted to the first PCB; and
 - the signal routes of the second PCB are electrically coupled to the signal routes of the first PCB.

11. The probe of claim 10, wherein:

the first PCB comprises a plurality of bonding pads on one surface thereof, each of which is electrically coupled to one of the signal routes of the first PCB;

the second PCB comprises a plurality of edge pads abutting the first PCB, each of which is electrically coupled to one of the signal routes of the second PCB; and

corresponding ones of the bonding pads and edge pads are electrically coupled to each other.

12. The probe of claim 11, wherein said edge pads comprise plated ends of said signal routes of the second PCB.

13. The probe of claim 11, wherein said edge pads comprise an extended, bent surface pad of the second PCB.

14. The probe of claim 11, wherein said edge pads comprise exposed vias of the second PCB.

15. The probe of claim 11, wherein corresponding ones of the bonding pads and edge pads are electrically coupled via solder.

16. The probe of claim 11, wherein corresponding ones of the bonding

pads and edge pads are electrically coupled via wire solder legs.

17. The probe of claim 10, wherein bodies of the plurality of spring pins are soldered to signal routes on opposite surfaces of the second PCB.

18. The probe of claim 10, wherein said signal routes of the second PCB comprise tip-network components positioned adjacent said spring pins.

19. The probe of claim 18, wherein said tip-network components comprise isolation resistors.

20. A method for forming a probe, comprising:

forming a row of vias in a first PCB;

cutting said first PCB along said row of vias, thereby exposing cross-sections of said vias at a cut edge of said first PCB;

electrically coupling a plurality of spring pins to a plurality of signal routes of the first PCB, wherein said signal routes of the first PCB are electrically coupled to ones of said vias, and wherein said spring pins are electrically coupled to the first PCB such that their probe tips extend beyond an edge of said first PCB opposite said cut edge;

abutting said cut edge of said first PCB to a second PCB, and electrically coupling said signal routes of the first PCB to signal routes of the second PCB, by means of said via cross-sections, so that said first PCB

extends perpendicularly from said second PCB.

21. The method of claim 20, wherein ones of said via cross-sections are coupled to signal routes on first and second opposite sides of the first PCB, the method further comprising:

cutting said first PCB along said cut edge to form first and second sets of edge pads from said via cross-sections; and

electrically coupling said edge pads to said signal routes of the second PCB.

22. A method for probing test points on a target board, comprising:

selecting a test probe comprising a plurality of spring pins that are arranged perpendicularly to a main body portion of the test probe, said main body portion comprising a first printed circuit board (PCB) to which the plurality of spring pins are electrically coupled;

moving the test probe over the target board to seat an alignment mechanism of the test probe to a corresponding alignment mechanism of the target board;

applying pressure to at least one of the i) test probe or ii) target board to cause the plurality of spring pins to engage the test points on the target board; and

routing signals from the test points to a test instrument via the test probe.

23. The method of claim 22, further comprising, while applying said pressure, applying enough pressure to cause a securing mechanism of the test probe to engage a securing mechanism of the target board.

24. The method of claim 22, wherein said moving comprises moving said first PCB along a path that is substantially parallel to said target board.

25. The method of claim 22, wherein the spring pins of the selected test probe are electrically coupled to traces of a second PCB that is perpendicularly attached to the first PCB.